

Appl. No. 10/606,118
Preliminary Amdt. dated May 5, 2004

REMARKS

This Preliminary Amendment amends the claims presented for examination in this application. Early examination and allowance of this application are respectfully requested.

The foregoing amendments to the specification and the claims are responsive to the first and second office actions, dated February 19, 2002 and October 22, 2002, respectively, and the Notice of Allowability dated March 25, 2003, mailed in the parent application of this continuation application.

The amendments to the claims and the specification are discussed below.

Amendments to the Specification

Portions of the specification have been amended based on the Examiner's comments in the February 19, 2002 Office Action to the parent application. In paragraph 3 of the Office Action, the Examiner objected to the reference to "FIG. 6" on page 7, line 1, because FIG. 6 was not included in the specification. In response, applicants have corrected page 7, line 1, to refer to "FIGS. 6A and 6B."

In addition, Applicants have made a number of other corrections to the specification. In particular, on page 6, line 4, the numbering of the lens as "12" has been corrected to "14" to match the drawings. On page 6, line 16, the term "micro reflector" has been changed to "micro-reflector" for consistency with the claims. On page 6, line 26, a period has been added to the end of the sentence.

No new matter has been added by these amendments.

Amendments to the Claims

Claim 11 has been amended to correctly depend from claim 10, not claim 9. Additionally, Applicants have amended claims 13 and 14 to replace the wording

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"filament" with the correct wording "light emitting element," as properly associated with LED's. Lastly, claim 4 has been amended to correct a typographical error by replacing "exists" with the word "exits."

Additionally, claims 2-4, 7, 8, and 12-14 have been canceled without prejudice.

Rejections based on 35 U.S.C. § 112

Claims 3, 9, and 10 have been amended to overcome the Examiner's rejections to the claims under 35 U.S.C. § 112, in the February 19, 2002 Office Action to the parent application.

The Examiner rejected claim 3, stating that "the beam of light" on line 4 is not clearly distinguished from other beams of light. Applicants have amended claim 3 to recite "the divergent beam of light" to clarify the recital. The Examiner also rejected claim 9 on this basis. Therefore, similar to claim 3 above, Applicants have amended claim 9, where relevant, to recite "the divergent beam of light."

The Examiner also rejected claim 10, stating that the term "component" did not recite the elements in specific terms and interpreted the word to include the LED and the reflector. Applicants respectfully disagree, as the term "components" refers to the circuitry numbered 98 in the Figures. The circuitry is referred to in the originally-filed specification on page 7, line 11, as "mounting circuitry" and on page 9, lines 18 and 25, as "associated circuitry". In response, Applicants have amended claim 10, replacing the recital "components are" with "associated circuitry is" to clarify recital of the "associated circuitry" as described in the specification. Applicants also have amended the specification to replace the term "mounting circuitry" on page 7 with "associated circuitry" for consistency. These corrections to wording are not narrowing amendments of these claims. This rejection should now be withdrawn.

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Claims 1-6 and 8

Independent claim 1 has been amended to recite additional features and thereby better distinguish over the cited references. In particular, claim 1 has been amended to recite the limitations previously set forth in dependent claims 2, 3, and 4.

The Examiner previously rejected claim 1 under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 4,698,730 to Sakai ("the Sakai patent") or, alternatively, over U.S. Patent No. 5,490,045 to Lindner ("the Lindner patent") in view of U.S. Patent No. 4,530,040 to Petterson ("the Petterson patent"). However, in the October 22, 2002 Office Action, the Examiner stated that claims 4, 5, and 8 would be allowable if written in independent form including all of the limitations of the base claim and any intervening claims. Applicants have complied with the Examiner's request by amending claim 1 to include the limitations set forth in dependent claims 2, 3, and 4. Therefore, amended claim 1 should now be in condition for allowance. Additionally, dependent claims 5 and 8 should also be in condition for allowance.

In the Office Actions to the parent application, the Examiner rejected dependent claim 6 under 35 U.S.C. § 103(a), as allegedly unpatentable over the combination of one or more of the Sakai patent, the Lindner patent, the Petterson patent, and U.S. Patent No. 2,469,080 to Rosin ("the Rosin patent"). Claim 6, however, depends from independent claim 1. None of the Sakai patent, the Lindner patent, the Petterson patent, or the Rosin patent disclose the invention set forth in amended claim 1. Therefore, dependent claim 6 allowable for the same reasons independent claim 1 is allowable.

Claims 9 and 12

Independent claim 9 has been amended to include the limitations recited in dependent claim 12. Amended claim 9 now recites that the "divergent beam of light passes substantially through the lens' first portion to form a first parallel beam of light,"

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and that it comprises a lens with a first portion that is convergent and "a second portion that passes light without changing its direction." Claim 12 has been canceled.

The Examiner previously rejected claims 9 and 12 in the February 19, 2002 and October 22, 2002 Office Actions, stating that the claims were anticipated by the Sakai patent and/or U.S. Patent No. 5,093,768 to Ohe ("the Ohe patent"). The invention recited in newly amended claim 9, however, requires that the divergent beam of light pass substantially through the lens' first portion. Neither the Sakai patent or the Ohe patent, however, disclose this limitation. Additionally, amended claim 9 recites that the lens has a first portion that is convergent and a second portion "that passes light without changing its direction." Again, neither the Sakai patent or the Ohe patent disclose this limitation. Therefore, claim 9 should be in condition for allowance.

Claims 10 and 11

The Examiner previously rejected independent claim 10 as allegedly obvious in view of U.S. Patent No. 4,733,355 to Serizawa *et al.* ("the Serizawa patent"). The Serizawa patent generally discloses a vehicular lamp incorporating light-emitting diodes mounted on a printed circuit board, all enclosed in a main lamp body. Each diode is paired to a parabolic reflector having its focal point at that of the diode tip. The Examiner alleged that the Serizawa patent disclosed an illuminating device comprising an illuminator assembly, a circuit board, an LED, a parabolic reflector with focal point coincident to the tip of the LED, and housing.

Applicants have amended claim 10, however, to recite that the illuminator assembly, instead of the parabolic reflector, has the recited flange. Support for this amendment is found in the specification on page 7, lines 9-12, and in Figures 2 and 7A. Claim 10 has also been amended to recite that the flashlight further comprises a lens have a convergent portion, a non-convergent portion, and lens flange. The convergent portion includes a focal center point. Also, amended claim 10 recites that the LED is configured

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to emit light from a light emitting element to produce a divergent beam of light having a vertex and additional light outside the divergent beam. The flange is configured to be received within the lens flange to position the LED, so that the light emitting element is positioned at a focal point (numbered 84 in the Figures) of the convergent portion. Also, the divergent beam is centered on a focal center point (numbered 86 in the Figures) of the convergent portion. The divergent beam substantially passes through the convergent lens portion to form a first beam of parallel light, and the additional light forms a second beam of parallel light by reflection from the parabolic reflector, this beam passing through the non-convergent portion of the lens. Additionally, the associated circuitry is recited as configured to provide power to the LED. Support for these amendments exists in the specification at page 7, lines 9-24, in Figures 6A, 6B, 7A, 7C, and 7D, and generally throughout the specification.

In view of the amendments to claim 10 discussed above, the subject matter of claim 10 would not have been obvious in view of the Serizawa patent. The Serizawa patent does not disclose or suggest use of the lens having convergent and nonconvergent portions, LED incorporating a parabolic micro-reflector, parabolic reflector, and associated components in the specific configuration recited in claim 10. The assembly disclosed in the Serizawa patent includes no such system incorporating the lens, parabolic reflector and additional components as described to form parallel beams of light. In view of the amendments to claim 10, claim 10 should now be in condition for allowance.

Claim 11, which depends from claim 10, should also be in condition for allowance for the same reasons that claim 10 is in condition for allowance.

New Claims 15-20

New independent claims 15, 16, 18, and 19 have been added. These claims are identical to the claims that were allowed in the Examiner's Notice of Allowability, dated March 21, 2003, in the parent application. Therefore, new claims 15, 16, 19, and

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20 are allowable for the same reasons they were allowable in the Examiner's Notice of Allowability. No new matter has been introduced by these claims.

This Preliminary Amendment also adds new dependent claims 17 and 18. These claims depend from claim 1, adding limitations as to the relationship between the lens' convergent diameter D, a focal distance L, and the directivity angle A. Therefore, dependent claims 16 and 18 are allowable for at least the same reasons that claim 1 is allowable.

Conclusion

Applicant respectfully requests entry of the foregoing amendments. No new matter has been introduced by the foregoing amendments. Applicant respectfully requests an early examination and allowance of the application.

Respectfully submitted,

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